

REMARKS

Claims 1-30 were pending in this application, with Claims 1 and 26 being independent.

Claims 16-17 and 22 have been cancelled and Claims 1, 10-12, 18 and 21 have been amended.

Accordingly, Claims 1-15, 28-21 and 23-30 remain in prosecution.

Claims 26-30 are allowed, for which Applicants extend thanks to the Examiner.

Claims 10-12 stand objected to, but would be allowable if re-written in independent form. Applicants have done that for each of the three claims. Thus, Claims 10-12 are now allowable too, for which Applicants also extend thanks to the Examiner.

Applicants will now turn to the substance of the Action.

**Applicants' Response to
the Section 112 Rejections**

Claim 21 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Applicants have amended that claim so that it recites the inventive composition in combination with and between two

mated substrates, where the composition when cured bonds together the two mated substrates. The substrates are constructed of metals (such as steel or aluminum) or synthetics (such as glass cloth phenolics, phenolic composites and plastics).

As so defined, Applicants submit that the Section 112 rejection has been overcome and should be withdrawn.

Claim 21 was also objected to under 37 C.F.R. § 1.75(c). Applicants submit that the amendment introduced herein obviates that objection.

In addition, Claim 12 was objected to because of the lack of the "A" in the claim. This printer error has been corrected, and the "A" now appears in the claim.

Accordingly, reconsideration and withdrawal of the Section 112 rejection is respectfully requested.

**Applicants' Response to
the Section 102 Rejection**

Claim 22 has been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 4,237,242 (Frankel).

Applicants' cancellation of that claim renders moot its rejection.

**Applicants' Response to
the Section 103 Rejections**

Claims 1-9 and 13-25 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious from International Patent Publication No. WO 95/181183 (Leo), in view of U.S. Patent No. 5,137,990 (Corley) and/or Frankel. Reasons for this rejection are given at pages 3-5 of the Action.

The rejection is respectfully traversed.

Applicants review briefly for the Examiner certain of the salient features of the present invention, so as to further his understanding thereof.

Claim 1 is directed to two-part room-temperature curable compositions having high flash point and low odor. The compositions combine epoxy and acrylate components in one part and epoxy hardener and transition metal complex in the second part. Curing agents are provided for both the (meth)acrylate and epoxy components. The recited compositions demonstrate at least substantial maintenance of at least one physical property selected from the group consisting of fixture time, adhesion strength, and adhesion strength over time, after exposure to at least one condition selected from the group consisting of elevated temperatures, moisture and a chemical environment.

Three patent documents have been cited against the patentability of certain of the claims of this application. Those documents are discussed in turn below.

Leo describes epoxy compositions compatible with polyamine curing agents. More specifically, Leo speaks to two part compositions in which one part contains resins -- both epoxy and (meth)acrylate -- and the other part contains a liquid hardener of a polyamine. While Leo makes passing reference to accelerators, there is no express disclosure as to what those accelerators may be, let alone that such accelerators may be the ones now recited in Claim 1, as amended.

Corley describes heat curable compositions of polyepoxide, a poly(meth)acrylate ester of a polyol, an aromatic monomer, an unsaturated monomer, an aromatic amine, a free-radical initiator, and optionally an accelerator for the epoxy curing reaction. While Corley makes passing reference to accelerators, there is no express disclosure as to what those accelerators may be, let alone that such accelerators may be the ones now recited in Claim 1, as amended.

As a heat cured system, the compositions of Corley are not relevant to the claimed room-temperature curable compositions. In fact, as a whole, Corley teaches away from the present invention.

The systems of Corley are uniquely tied to the use of aromatic unsaturated monomer and aromatic amine epoxy-hardener. In particular, part of the problem which Corley addresses is the poor properties obtained when polyether resins are used in combination with styrene blends. At lower temperatures, solubilities are typically lower and cure speeds are definitely slower. Thus, the problems described by Corley would be expected to increase (not decrease) in the context of a room-temperature curable composition.

The use of an aromatic amine in combination with an unsaturated aromatic monomer is essential in order to achieve the properties described in Corley. Nothing therein motivates the use of a transition metal complex accelerator in the absence of the aromatic amine. Corley indicates that the function of the transition metal complex is as an accelerator of the epoxy cure. This reaction occurs at an elevated temperature, not at room temperature.

Corley's inclusion of a few transition metal complex catalysts in a long list of curing accelerators employable in heat-cured systems, absent hindsight, does not provide any motivation to employ such compositions in a room-temperature curing composition as recited in Claim 1.

Frankel is directed to and claims a composition comprising a linear addition copolymer, derived from a monomer mixture containing from 5 to 45% by weight of one or more ethylenically unsaturated carboxylic acids. The composition also contains a resin-forming polyepoxy compound. The T_g of the copolymer is from -45°C to 20°C, and the copolymer is reportedly capable of forming a thermoset resin by reaction with a resin-forming epoxy compound containing a plurality of epoxide groups, and a catalyst in the amount of 0.04% to 10% by weight based on the weight of the copolymer. The catalyst is said to be a transition metal chelate stable at ambient temperatures up to about 22°C and which decomposes to release the chelated metal when heated to temperatures of about 100°C. To the extent that any quantity of organic solvent is present, it is present in an amount from 0% to 10% of the combined weight of copolymer and solvent.

None of Leo, Corley or Frankel discloses, teaches or suggests the invention as defined by Claim 1, as amended, and there is no motivation within any of these documents to combine them in such a way so as to arrive at the invention as so defined. Even if such motivation was present (which it is not), the combination is deficient at best with regard to its inclusion of the specific accelerators recited in Claim 1.

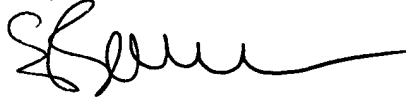
Reconsideration and withdrawal of this Section 103 rejection are thus respectfully requested.

CONCLUSION

Applicants respectfully submit that in view of the above, the subject application is in condition for allowance.

Applicants' undersigned attorney may be reached by telephone at (860) 571-5001 or by facsimile at (860) 571-5028. All correspondence should be directed to the address given below.

Respectfully submitted,



Steven C. Bauman
Attorney for Applicants
Registration No. 33,832

HENKEL CORPORATION
Legal Department
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067